Minnesota

Science and Engineering Profile

| | STATE | U.S. | Rank | | STATE | U.S. | Rank |
|---|----------|-------------|------|---|---------|-----------|------|
| Doctoral scientists,1995 | 8,324 | 453,928 | 18 | Total R&D performance, 1995 (millions) | \$3,087 | \$177,210 | 19 |
| Doctoral engineers,1995 | 1,262 | 86,738 | 22 | Industry R&D, 1995 (millions) | \$2,636 | \$130,332 | 14 |
| | | | | | | | |
| S&E doctorates awarded, 1996 | 505 | 27,230 | 18 | Academic R&D, 1996 (millions) | \$341 | \$22,481 | 23 |
| of which, in life sciences | 31% | 25% | | of which, in life sciences | 72% | 56% | |
| in engineering | 23% | 23% | | in engineering | 10% | 16% | |
| in social sciences | 14% | 15% | | in mathematics and computer sciences | 5% | 4% | |
| S&E postdoctorates, 1996 in doctorate-granting institutions | 756 | 37,019 | 15 | Higher education current-fund expenditures, 1995 (millions) | \$3,484 | \$182,602 | 18 |
| S&E graduate students, 1996 | 6,034 | 430,631 | 25 | Number of SBIR awards, 1990-1997 | 490 | 31,155 | 18 |
| in doctorate-granting institutions | | | | Patents issued to state residents, 1997 | 1,829 | 61,699 | 11 |
| Population, 1997 (000s) | 4,686 | 271,464 | 20 | Gross state product, 1996 (billions) | \$141.6 | \$7,677.4 | 18 |
| Civilian labor force, 1997 (000s) | 2,625 | 137,564 | 20 | of which, agriculture | 3% | 2% | |
| | | | | manufacturing, mining, construction | 24% | 23% | |
| Personal income per capita, 1997 | \$26,797 | \$25,598 | 11 | transportation, communication, utilities | 8% | 8% | |
| | | | | wholesale and retail trade | 17% | 16% | |
| Federal spending | | | | finance, insurance, real estate | 18% | 19% | |
| Total expenditures, 1997 (millions) | \$20,088 | \$1,405,060 | 25 | services | 19% | 20% | |
| R&D obligations, 1996 (millions) | \$678 | \$66,087 | 23 | government | 11% | 12% | |

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico. Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1996

[Thousands of Dollars]

| | Total | Federal | All FFRDCs | Industrial firms | Universities & | Other | State & local | State rank |
|--|---------|------------|------------|------------------|----------------|------------|---------------|------------|
| | | Intramural | | | Colleges | nonprofits | government | |
| Total, all agencies | 678,477 | 31,742 | 0 | 345,050 | 187,673 | 110,073 | 3,939 | 23 |
| | | | | | | | | |
| Department of Agriculture | 22,111 | 14,466 | 0 | 164 | 7,463 | 18 | 0 | 20 |
| Department of Commerce | 18,358 | 185 | 0 | 17,114 | 1,059 | 0 | 0 | 16 |
| Department of Defense | 366,991 | 683 | 0 | 313,308 | 9,079 | 43,921 | 0 | 21 |
| Department of Energy | 6,079 | 0 | 0 | 37 | 6,042 | 0 | 0 | 32 |
| Dept. of Health & Human Services | 200,207 | 877 | 0 | 4,595 | 126,589 | 65,344 | 2,802 | 15 |
| Department of Interior | 4,312 | 4,024 | 0 | 8 | 225 | 0 | 55 | 30 |
| Department of Transportation | 3,722 | 0 | 0 | 2,475 | 165 | 0 | 1,082 | 27 |
| Environmental Protection Agency | 15,098 | 11,507 | 0 | 1,053 | 2,488 | 50 | 0 | 8 |
| Nat'l Aeronautics & Space Admin. | 7,559 | 0 | 0 | 4,701 | 2,485 | 373 | 0 | 31 |
| National Science Foundation | 34,040 | 0 | 0 | 1,595 | 32,078 | 367 | 0 | 20 |
| State rank | 23 | 37 | na | 19 | 22 | 8 | 10 | |

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable